

LYNCHBURG CITY COUNCIL

Agenda Item Summary

MEETING DATE: **March 26, 2002 – Work Session**

AGENDA ITEM NO.: **2A**

CONSENT:

REGULAR: **X**

CLOSED SESSION:
(Confidential)

ACTION: **X**

INFORMATION:

ITEM TITLE: **Monument Terrace Steps Renovation
City Project No. 98105-M**

RECOMMENDATION: Authorize staff to proceed to final design based on the restoration option with the ability to scale back or add to the construction dependant upon input from the community and funding availability.

SUMMARY: Versar Global Solutions, Inc. will present the findings of the Phase I Report on Monument Terrace Steps which outlines three options for rehabilitation of the 1882 Monument including stabilization, restoration, and enhancement. Effects of poor site drainage, age, weathering, and disrepair are evident at the Monument at the present time. Versar Global's executive summary showing construction cost estimates for the three options is attached. Staff recommends proceeding with at least the restoration plan for construction. This includes installation of an adequate drainage system, footings, and expansion joints between the terrace slabs and the stairs, and repairing stairs, railings, balustrades, walls, light fixtures, fountains, and monuments. There will be opportunities to construct some or all of the upgrades if additional funds can be raised from the private sector. Based on the findings and recommendations of the report, staff has begun to arrange meetings with internal staff, veterans' groups, and community organizations. Staff is prepared to move ahead with citizen information/input meetings and the preparation of the construction drawings for the rehabilitation of the Monument.

PRIOR ACTION(S):

On February 1, 2000, PDC approved the development of a design strategy and preliminary cost estimates.

On April 3, 2001, PDC approved a comprehensive investigation by Versar Greenwood.

FISCAL IMPACT: Design costs for the restoration option are included in the FY 2002 Capital Budget and estimated at \$ 200,000. Construction of the restoration option would require an additional appropriation of \$1,879,295. This is the amount that has been proposed in the FY 2003 Capital Budget. No additional FTE's will be required but there would be additional maintenance costs.

CONTACT(S): Dee Dee Conner (847-1360, ext. 296)
Lee Newland (847-1360, ext. 270)
Bruce McNabb (847-1362, ext. 268)

ATTACHMENT(S): Executive summary of the rehabilitation of Monument Terrace

REVIEWED BY:



Versar Global Solutions, Inc.

Architecture ■ Engineering ■ Construction

October 3, 2001

Ms. Deedee Connor
The City of Lynchburg
Department of Public Works
City Hall
900 Church Street
Lynchburg, Virginia 24504

Re: Rehabilitation of Monument Terrace; Versar Job No. 200264

Dear Ms. Connor:

Versar Global Solutions, Inc., is pleased to submit our report on the initial phase of the rehabilitation of Monument Terrace. This initial phase of the project includes a comprehensive analysis of the existing structure and development of recommendations for stabilization, restoration, and enhancement measures. Our work under this initial phase addresses the hardscape of the steps and plazas, the statuary and placards, the landscaping, foundations and retaining walls, lighting, water features, and site drainage

This phase of the project is to evaluate the condition of Monument Terrace and develop recommendations only. Selection of a final approach, development of detailed designs and work plans, and implementation of the recommendations are to be developed in later phases.

Versar Global Solutions, Inc., is pleased to support the City in this important restoration of Monument Terrace. We look forward to discussing the contents of the report, particularly the recommendations for stabilizing, restoring, and enhancing Monument Terrace, with the City and other interested stakeholders. Please contact me at 847-3400 if you have any questions regarding our report, or wish to schedule a time to discuss the report in depth.

Sincerely,

William L. Allen, P.E.
Project Manager

PROJECT TEAM/PREFACE

This project consists of developing and implementing a program to stabilize, restore, and enhance Monument Terrace, located between Church and Court Streets at Ninth Street, Lynchburg, Virginia. This phase of the project is to evaluate the condition of Monument Terrace and develop recommendations only. Selection of a final approach, development of detailed designs and work plans, and implementation of the recommendations are to be developed in later phases. The overall project is under the direction of the City of **Lynchburg, Department of Public Works**.

This initial phase of the project includes a comprehensive analysis of the existing structure and development of recommendations for stabilization, restoration, and enhancement measures. This initial phase addresses the hardscape of the steps and plazas, the statuary and placards, the landscaping, foundations and retaining walls, lighting, water features, and site drainage.

This phase of the project **was** performed by **Versar Global Solutions, Inc.** (formerly Versar Greenwood, Inc.). **Versar Global Solutions, Inc.** (Versar) is a Lynchburg-based firm providing architectural, engineering, environmental, and construction services. Versar provided the overall project management and direction, as well as technical analyses of the civil, structural, electrical, and plumbing systems. In addition, Versar developed conceptual designs for various enhancements and was responsible for development of the final report, including cost estimating.

Versar was assisted by several consultants and specialists, including:

John Milner Associates, Inc., specialists in architectural history, archaeology, and restoration of historic structures, provided materials conservation services for the hardscape, statuary, and plaques.

OCULUS, a landscape architecture firm, provided analyses of the existing vegetation and recommendations for landscape design.

Hurt & Proffitt, Inc., a Lynchburg-based engineering firm, provided geotechnical investigation and analysis services.

In addition, Versar relied upon prior studies of the Monument Terrace conducted by the City of Lynchburg and its consultants, as well as information provided by materials providers and manufacturers, and by interested stakeholders.

TABLE OF CONTENTS

COVER LETTER

PREFACE/PROJECT TEAM

TABLE OF CONTENTS

REPORT	TAB 1
	PAGE
1.0 EXECUTIVE SUMMARY	1
2.0 SCOPE OF INVESTIGATION	3
2.1 Background	3
2.2 Project Description	3
2.3 Scope of Work	4
2.3.1 Measured Drawings	4
2.3.2 Condition Assessments	4
2.3.3 Testing and Research	4
2.4 Evaluation and Scope Determination	6
2.5 Cost Estimates	6
3.0 PRELIMINARY WORK PLANS	7
3.1 Summary of Key Conditions and Recommendations	7
3.2 Development Plans	9
3.2.1 Plan #1 - Stabilization	10
3.2.2 Plan #2 - Restoration	10
3.2.2 Plan #3 – Enhancement	10
3.3 Work Sequence	16
3.3.1 Protection of Components	16
3.3.2 Disassembly of Stair and Hand Rail Components	16
3.3.3 Soil Preservation	17
3.4 Maintenance Plan	18
3.4.1 Civil Maintenance	18
3.4.2 Structural Maintenance	19
3.4.3 Landscape Maintenance	19
3.4.4 Material Conservation Maintenance	20
3.4.5 Architectural Maintenance	20
3.4.6 Electrical Maintenance	20
3.4.7 Plumbing Maintenance	20

4.0 CIVIL CONDITION ASSESSMENT AND RECOMMENDATIONS 21

4.1	Civil	21
4.1.1	Civil Condition Assessment	21
4.1.2	Civil Recommendations	23
4.2	Structural	24
4.2.1	Structural Condition Assessment	24
4.2.2	Structural Recommendations	28
4.3	Landscape	30
4.3.1	Landscape Condition Assessment	30
4.3.2	Landscape Recommendations	33
4.4	Material Conservation	40
4.4.1	Material Conservation Condition Assessment	40
4.4.2	Material Conservation Recommendations	68
4.5	Architectural	75
4.5.1	Architectural Condition Assessment	75
4.5.2	Architectural Recommendations	76
4.6	Electrical	77
4.6.1	Electrical Condition Assessment	77
4.6.2	Electrical Recommendations	80
4.7	Plumbing	82
4.7.1	Plumbing Condition Assessment	82
4.7.2	Plumbing Recommendations	83

APPENDIX A - Civil Drawing	TAB2
APPENDIX B - Landscape Photographs & Schematic Drawings	TAB3
APPENDIX C - Material Conservation Photographs & Drawings	TAB4
APPENDIX D - Architectural Drawings	TAB 5
APPENDIX E - Structural Drawings	TAB6
APPENDIX F - Geotechnical Report	TAB7
APPENDIX G - Reference Materials	TAB8

1.0 EXECUTIVE SUMMARY

Monument Terrace is a historic landmark and one of the most prized cultural resources of the Lynchburg community. Original construction of the Monument took place in 1882 including a memorial fountain at the base of Court House Hill with steps leading up to the Confederate Monument at the top of the slope. Additional war memorials and adjacent properties have been added to Monument Terrace over the years. In addition to being a significant cultural resource, its key location downtown makes it a prime focal point for community efforts to re-develop downtown. However, Monument Terrace is in need of repair and restoration. The effects of poor site drainage, age, weathering, and disrepair are readily evident. There has been significant displacement of portions of Monument Terrace leading to some concerns for safety. Landscaping is overgrown and unkempt, many of the memorials are stained, the fountains have not functioned in years, and the terraces and stairs themselves are damaged.

Versar Global Solutions, Inc. (formerly Versar Greenwood, Inc.) was engaged by the City of Lynchburg to develop a preliminary work plan for rehabilitation of Monument Terrace. The preliminary work plan will be later used to develop final designs and construction documents, and to provide direction to rehabilitation of the Monument.

Versar and a team of specialists conducted evaluations of the Monument's condition and identified seven key areas of concern that should be addressed:

1. Poor site drainage leading to soil erosion and displacement of the stairs and terraces.
2. Landscaping that is overgrown and in poor condition.
3. Structural components (monument foundations and on-site retaining walls) that are failing or in danger of failing.
4. Features preservation to repair damaged or missing elements.
5. Off-site features that could affect the overall appearance/stability of the Monument site.
6. Usability (maintaining or enhancing functions and accessibility)
7. O & M (long term operations and maintenance of the restored Monument Terrace).

Various actions have been recommended to address these areas of concern. These recommendations represent differing levels of investment, and have been incorporated into three development plans. The first plan represents the minimal effort recommended to **stabilize** the Monument. This plan includes installing an adequate drainage system, footings, and expansion joints between terrace slabs and stairs, as well as replacement of the retaining wall at the City Deeds and Records Office terrace. The second plan goes beyond stabilization to include **full restoration** of the Monument. Restoration includes repairing the stairs, railings, balustrades, walls, light fixtures, fountains, and monuments. The third plan includes full restoration plus several enhancements to provide additional space for memorials and/or exhibits, and limited accessibility for disabled visitors. Recommendations include resetting all stairs, reworking the landing entrance to Mr.

Elder's Rose Garden, addition of a POW/MIA (or other) memorial space, creating a display area west of the Unitarian Church, and adding flag pole supports and electrical upgrades at the lowest terrace level.

Cost estimates were developed for each recommendation. While some of the recommendations can be carried out independently, many of the recommendations are interconnected and would need to be addressed sequentially or as a package to be effective. The site is difficult to access and work on; staging and sequencing of any construction/repair activity will be critical to maintain cost control. Preliminary cost estimates for each plan are shown below:

- Plan 1 – Stabilization \$ 835,540
- Plan 2 – Restoration \$1,980,210
- Plan 3 – Enhancements \$3,895,108

These costs represent only preliminary estimates, and are subject to change during the selection of the City's approach to rehabilitating Monument Terrace, and during final design of the selected approach.

Many of the elements shown as line items in the Development Plan Summary may be accomplished at significantly less cost to the City through donations and/or gifts. For example, during the course of this study, a local supplier of lighting fixtures expressed an interest in donating services to repair the existing light fixtures. Other similar donations may be available.

Additional detail is provided in the following sections and appendices:

- 2.0 Scope of Investigation
- 3.0 Preliminary Work Plan (including detailed summary of recommendation and cost estimates).
- 4.0 Condition Assessments and Recommendations

Appendices:

- Tab 2 - Civil Drawings
- Tab 3 - Landscape Photographs & Schematic Drawings
- Tab 4 - Material Conservation Photographs & Drawings
- Tab 5 - Architectural Drawings
- Tab 6 - Structural Drawings
- Tab 7 - Geotechnical Report
- Tab 8 - Reference Material

See the Table of Contents for a detailed listing of all section headings.